

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2002-NM-283-AD; Amendment 39-13794; AD 2004-18-15]**

**RIN 2120-AA64**

**Airworthiness Directives; McDonnell Douglas Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F, DC-10-30F (KC10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, and MD-10-30F Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

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**SUMMARY:** This amendment supersedes an existing airworthiness directive (AD), applicable to McDonnell Douglas transport category airplanes listed above, that currently requires a one-time detailed inspection to determine if wire segments of the wire bundle routed through the feed-through on the aft side of the flight engineer's station are damaged or chafed, and corrective actions if necessary. That AD also requires revising the wire bundle support clamp installation at the flight engineer's station. For certain airplanes, this amendment requires a new revision of the wire bundle support clamp installation, and modification of a certain wire bundle. This amendment also reduces the applicability in the existing AD. The actions specified by this AD are intended to prevent chafing of the wire bundle located behind the flight engineer's panel caused by the wire bundle coming in contact with the lower edge of the feed-through, and consequent electrical arcing, which could result in smoke and fire in the cockpit. This action is intended to address the identified unsafe condition.

**DATES:** Effective October 19, 2004.

The incorporation by reference of certain publications, as listed in the regulations, is approved by the Director of the Federal Register as of October 19, 2004.

The incorporation by reference of Boeing Alert Service Bulletin DC10-24A149, Revision 02, dated April 5, 2001, as listed in the regulations, was approved previously by the Director of the Federal Register as of January 16, 2002 (66 FR 64121, December 12, 2001).

The incorporation by reference of McDonnell Douglas Alert Service Bulletin DC10-24A149, Revision 01, dated July 28, 1999, as listed in the regulations, was approved previously by the Director of the Federal Register as of June 21, 2000 (65 FR 31253, May 17, 2000).

**ADDRESSES:** The service information referenced in this AD may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024). This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**FOR FURTHER INFORMATION CONTACT:** Natalie Phan-Tran, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5343; fax (562) 627-5210.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 2001-24-21, amendment 39-12538 (66 FR 64121, December 12, 2001), which is applicable to all McDonnell Douglas Model DC-10 series airplanes and Model MD-10-10F and -30F series airplanes, was published in the Federal Register on October 2, 2003 (68 FR 56796). The action proposed to continue to require a one-time detailed inspection to determine if wire segments of the wire bundle routed through the feed-through on the aft side of the flight engineer's station are damaged or chafed, and corrective actions if necessary. That action also proposed to continue to require revising the wire bundle support clamp installation at the flight engineer's station. For certain airplanes, that action proposed to require a new revision of the wire bundle support clamp installation, and modification of a certain wire bundle. That action also proposed to remove certain airplanes from the applicability in the existing AD.

## Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received from a single commenter.

## Request To Withdraw the Proposed AD

The commenter asks that the proposed AD be withdrawn from consideration. The commenter reiterates the requirements of the proposed AD and states that the newly proposed rule would require yet another replacement of the same clamp support bracket for the subject wire bundle. The commenter strongly objects to the proposed AD, and notes that its airplanes were inspected per the requirements of AD 2001-24-21, and no chafed or damaged wires were found. The commenter adds that it has no recorded failures of the wire bundle support bracket, and has replaced the bracket as specified in Boeing Alert Service Bulletin DC10-24A149, Revision 02, dated April 5, 2001 (referenced in the existing AD as the appropriate source of service information for accomplishment of the required actions). The commenter also adds that the proposed AD is unnecessary and states it is concerned that the succession of service bulletin revisions and superseded ADs adds confusion to compliance requirements, and creates an unnecessary risk of non-compliance.

We do not agree. As we explained in the preamble of the proposed AD, we have determined that the procedures for revising the wire bundle support clamp installation required by AD 2001-24-21 do not adequately address the identified unsafe condition for certain airplanes. In addition, the procedures specified in Revision 02 of Boeing Alert Service Bulletin DC10-24A149 (referenced in AD 2001-24-21 for accomplishment of the required actions) do not prevent electrical arcing or chafing, even if no chafed or damaged wire bundles were found during the inspection. Since we

issued that AD, we have determined that the required bracket installation is inadequate because the bracket interferes with existing potting inserts. The procedures for revising the wire bundle support clamp installation at the flight engineer's station described in Revision 02 of Boeing Alert Service Bulletin DC10-24A149 have been changed by the issuance of two new revisions. These changes are included in the procedures specified in Boeing Alert Service Bulletins DC10-24A149, Revision 03, dated September 19, 2002; and Revision 04, dated March 26, 2003. Revision 03 adds procedures for the installation and relocation of a new bracket when revising the wire bundle support clamp installation, and revision of the wire bundle support clamp installation at the first observer's station for Group 3 airplanes. Revision 04 adds procedures for modification of Groups 1 and 2 airplanes on which wire bundle run (RDZ) is installed, and was changed as specified in Revision 03 of the alert service bulletin. In light of the above information, we have determined that issuance of the final rule is necessary.

### **Request To Extend Compliance Time**

The commenter asks that the compliance time of one year for the revision of the wire bundle support clamp installation be extended to 18 months. The commenter notes that, since recent inspections of the subject area were done in accordance with the previously issued AD, the wire chafing condition that initially prompted the rulemaking has already been addressed; therefore, if any unsafe condition was found by any operator, it has already been corrected. The commenter adds that, due to this fact, allowing an 18-month compliance time for the latest correction to the bracket installation would in no way jeopardize the airworthiness or the level of safety of affected airplanes. We infer that the commenter is also requesting that the compliance time to accomplish the modification, per paragraph (d) of the proposed rule, be extended to 18 months.

We agree that the compliance time may be extended to 18 months. We have coordinated the extension of the compliance time with the manufacturer and determined that extending the compliance time will not adversely affect the operational safety of the fleet. We have revised paragraphs (c) and (d) of the final rule to reflect the 18-month compliance time.

### **Request To Change Cost Impact Section**

The commenter disagrees with the estimate of 2.5 work hours for accomplishment of the bracket replacement. The commenter states that, due to confined work space and numerous wire bundles in the area of the modification, maintenance personnel estimate 4 work hours for accomplishment of the actions. The commenter asks that the work hours be changed before the proposed AD is issued.

We do not agree, as we have reiterated the work hours specified in Revision 04 of the referenced alert service bulletin. The number of work hours necessary to accomplish the actions, specified in the cost impact information, was provided by the manufacturer based on the best data available to date. The cost analysis in AD rulemaking actions typically does not include additional costs, such as the cost for unforeseen work hours used when working in a confined work space with numerous wire bundles in the work area. Because such work hours may vary significantly from operator to operator, depending on the airplane configuration, they are almost impossible to calculate. No change to the final rule is necessary in this regard.

### **Conclusion**

We have carefully reviewed the available data, including the comments noted above, and have determined that air safety and the public interest require adopting the AD as proposed.

## **Cost Impact**

There are approximately 412 airplanes of the affected design in the worldwide fleet. The FAA estimates that 298 airplanes of U.S. registry will be affected by this AD.

The inspection that is currently required by AD 2001-24-21, takes about 1 work hour per airplane to accomplish, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$65 per airplane.

The revision of the wire bundle support clamp installation that is currently required by AD 2001-24-21 takes about 2 work hours per airplane to accomplish, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$130 per airplane.

For Groups 1, 2, and 3 airplanes: It will take about 2 work hours per airplane to do the new revision of the wire bundle support clamp installation, at an average labor rate of \$65 per work hour. Required parts cost is minimal. Based on these figures, the cost impact of the installation is estimated to be \$38,740, or \$130 per airplane.

For Group 4 airplanes: It will take about 1 work hour per airplane to do the new modification of the wire bundle, at an average labor rate of \$65 per work hour. Required parts cost is minimal. Based on these figures, the cost impact of the modification is estimated to be \$19,370, or \$65 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

## **Regulatory Impact**

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

## **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. Section 39.13 is amended by removing amendment 39-12538 (66 FR 64121, December 12, 2001), and by adding a new airworthiness directive (AD), amendment 39-13794, to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2004-18-15 McDonnell Douglas:** Amendment 39-13794. Docket 2002-NM-283-AD. Supersedes AD 2001-24-21, Amendment 39-12538.

**Applicability:** Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F, DC-10-30F (KC10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, and MD-10-30F airplanes; as listed in Boeing Alert Service Bulletin DC10-24A149, Revision 04, dated March 26, 2003; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent chafing of the wire bundle located behind the flight engineer's panel caused by the wire bundle coming in contact with the lower edge of the feed-through, and consequent electrical arcing, which could result in smoke and fire in the cockpit, accomplish the following:

## **Restatement of Requirements of AD 2001-24-21**

### **Inspection and Repair, if Necessary**

(a) Within 1 year after June 21, 2000 (the effective date of AD 2000-10-03, amendment 39-11727), perform a one-time detailed inspection to determine if the wire segments of the wire bundle routed through the feed-through on the aft side of the flight engineer's station are damaged or chafed, in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A149, Revision 01, dated July 28, 1999; or Boeing Alert Service Bulletin DC10-24A149, Revision 02, dated April 5, 2001; Revision 03, dated September 19, 2002; or Revision 04, dated March 26, 2003. If any damaged or chafed wire is found, prior to further flight, repair in accordance with the alert service bulletin.

**Note 1:** For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

### **Revision of Wire Bundle Support Clamp Installation**

(b) Within 1 year after January 16, 2002 (the effective date of AD 2001-24-21, amendment 39-12538), revise the wire bundle support clamp installation at the flight engineer's station, in accordance with Boeing Alert Service Bulletin DC10-24A149, Revision 02, dated April 5, 2001.

## New Requirements of This AD

### New Revision of Wire Bundle Support Clamp Installation

(c) Within 18 months after the effective date of this AD, do the applicable actions specified in paragraph (c)(1), (c)(2), or (c)(3) of this AD, in accordance with Boeing Alert Service Bulletin DC10-24A149, Revision 04, dated March 26, 2003.

(1) For Group 1 airplanes, as defined in Boeing Alert Service Bulletin DC10-24A149, Revision 04, dated March 26, 2003: Revise the wire bundle support clamp installation at the flight engineer's station.

(2) For Group 2 airplanes, as defined in Boeing Alert Service Bulletin DC10-24A149, Revision 04, dated March 26, 2003: Revise the wire bundle support clamp installation at the flight engineer's station.

(3) For Group 3 airplanes, as defined in Boeing Alert Service Bulletin DC10-24A149, Revision 04, dated March 26, 2003: Revise the wire bundle support clamp installation at the first observer's station.

### Modification

(d) For Group 4 airplanes, as defined in Boeing Alert Service Bulletin DC10-24A149, Revision 04, dated March 26, 2003: Within 18 months after the effective date of this AD, modify the wire bundle in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC10-24A149, Revision 04, dated March 26, 2003.

### Alternative Methods of Compliance

(e) In accordance with 14 CFR 39.19, the Manager, Los Angeles Aircraft Certification Office, FAA, is authorized to approve alternative methods of compliance for this AD.

### Incorporation by Reference

(f) The actions must be done in accordance with the applicable service bulletin listed in Table 1 of this AD.

**TABLE 1.—SERVICE INFORMATION INCORPORATED BY REFERENCE**

Service information	Revision level	Date
McDonnell Douglas Alert Service Bulletin DC10–24A149	01	July 28, 1999.
Boeing Alert Service Bulletin DC10–24A149	02	April 5, 2001.
Boeing Alert Service Bulletin DC10–24A149	03	September 19, 2002.
Boeing Alert Service Bulletin DC10–24A149	04	March 26, 2003.

(1) The incorporation by reference of Boeing Alert Service Bulletin DC10-24A149, Revision 03, dated September 19, 2002; and Boeing Alert Service Bulletin DC10-24A149, Revision 04, dated March 26, 2003; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Alert Service Bulletin DC10-24A149, Revision 02, dated April 5, 2001, was approved previously by the Director of the Federal Register as of January 16, 2002 (66 FR 64121, December 12, 2001).

(3) The incorporation by reference of McDonnell Douglas Alert Service Bulletin DC10-24A149, Revision 01, dated July 28, 1999, was approved previously by the Director of the Federal Register as of June 21, 2000 (65 FR 31253, May 17, 2000).

(4) Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

*[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr-locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr-locations.html).*

### **Effective Date**

(g) This amendment becomes effective on October 19, 2004.

Issued in Renton, Washington, on August 31, 2004.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-20406 Filed 9-13-04; 8:45 am]

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